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ABSTRACT

This booklet explores why movement education is important for preschool children, what activities to include in a program, how and where to conduct a program, and criteria that can help to structure the program environment. The first section presents a rationale for the use of movement education for helping preschool children to develop competence, self confidence, and readiness skills, and to deal with fear. A section on the content of movement education programs introduces the concepts behind fundamental movement skills, manipulative skills, and expressive skills. The guided discovery method of teaching is discussed in the next chapter, with suggestions to encourage learning about body image and actions. Safety considerations are also presented. The last chapter provides guidelines for designing areas for movement activities, suggestions for selecting equipment for indoor and outdoor spaces, and improvisations for movement apparatus. (PG)

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**Council on Physical Education for Children of
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MOVEMENT EDUCATION

For Preschool Children

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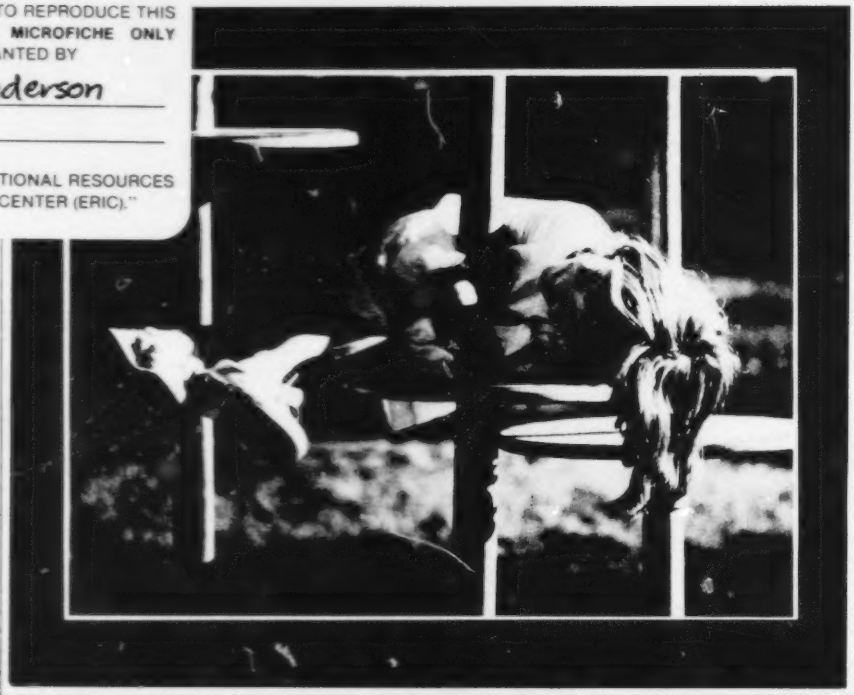

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Contents

Foreword			v
1	WHY Rationale	Maida L. Riggs	1
2	WHAT Content	Jane Young	9
3	HOW Teaching	John Fowler	21
4	WHERE Spaces & Places	Peter Werner	31
Contributors			41

Foreword

Movement is the essence of living for young children. Their bodies are both subject and object of their early learning experiences. As children gain neuro-muscular control, they grow in their capacity both to understand the physical world and to express and communicate their understanding non-verbally. Movement education addresses children's inherent capacity to learn about and through movement.

Preschool children are dynamic and spontaneous individuals with insatiable curiosity. Between the ages of two and six they satisfy their curiosity by learning about the world around them through movement. They are developmentally involved in practicing such emerging fundamental locomotor skills as running and jumping, and such manipulative skills as catching and throwing. They need to touch, manipulate, and look both at their bodies, in order to discover their physical capabilities and limitations, and at objects in the environment, in order to explore and understand physical properties of hardness, softness, and shape. Because movement is integral to preschool children's lives, it should be central to understanding them and the activities in which they should engage.

This book describes some of the reasons why movement is so important for young children. The movement education approach to learning has tremendous developmental potential. When children are allowed to move about as they learn, they make significant discoveries about their world. Movement is both the process and product of

their learning. Written for persons working with preschool children, this book explores *why* the movement education approach is important, *what* activities constitute a program, *how* and *where* it can be conducted, and *what* criteria may help structure the program environment.

The first section focuses on *why* movement education is important to the very young child. It emphasizes the significance of motor development and the child's special need for appropriate movement activities. Riggs explains why movement is one of the best learning modalities at this stage.

In the second section, Young explores *what* to include in a good movement education program. She summarizes the four basic elements of human movement and suggests activities which develop physical abilities and generic competencies.

Fowler tells *how* to present appropriate movement activities to pre-primary children in a good learning climate, and explains several different ways of directing learning experiences. This section illustrates processes for guiding learning experiences safely.

In section four, Werner discusses *where* movement activities may be presented to young children. His chapter includes considerations, both indoor and outdoor play areas, and equipment available for pre-primary programs.

It is impossible to design programs for any student population without understanding them. This text recognizes individual differences and presents material consistent with children's different developmental rates, styles of learning, needs, interests, and abilities. One of the greatest strengths of a movement education approach is the individualized learning which it fosters. All children are never expected to do the same thing at the same time

It has seemed unnecessary, even inadvisable, to include normative data on skill performance lest we be tempted to teach to them. Children vary so in skill acquisition at this age, that most performance standards do not adequately account for the variable relationship between neurological maturation (readiness) and motor learning.

The authors recognize, however, that the choice of activity, and the motivation children have for learning physical skills, are predicated on their physical growth and development. Children of these ages experience slow and steady physical growth, with small but appreciable annual increments of both weight and height. By two and one half years most children have lost the body fat associated with babyhood. Changes in body proportions make motor performance easier: head growth slows while limb growth accelerates. Because children also lose their protruding abdomens and are no longer so top heavy, they can begin to run fast and stop and change direction without falling.

Up to about the age of four, growth of the muscular system is roughly comparable to growth of the body as a whole. After this age, however, muscles develop relatively faster, giving children appreciably more strength and control. The larger muscles of the back and legs remain better developed than do the smaller ones of the hands and fingers. Partly because of this developmental pattern, children become proficient in running before they learn to throw a ball well. Concomitant with these physical changes, the developmental process of neuro-muscular maturation accounts for the body's increased responsiveness to activity; at the same time, activity facilitates development.

Growth is a function of time and young children have time before them. In many ways the discovery and practice of emerging motor skills may be compared with the acquisition of language. Range and variety of movement skills has its counterpart in freedom of verbal expression: the broader the base, the more solid the foundation for future use. A full complement of refined skills in either learning area will not be reached for many years. Yet the intent of this book is to ensure that the foundation be as broad and fully developed as possible for each child. It is the task of those of us who teach to provide pleasurable beginning experiences which help develop a repertoire of fundamental motor skills.

1 WHY

Maida L. Riggs

Rationale

During the first five or six years of life, children are expected to learn to cope with the natural and human world. They acquired the physical skills to get about in the environment, and learn communication and thinking skills. By exploring and manipulating things and ideas, they learn about their world and about learning. Physical activity stimulates self-discovery as well, and the early years are largely devoted to acquiring fundamental motor patterns and manipulative skills. These "self-sufficiency" skills provide the foundation for the more specific skills needed for school, play, and sport. It appears crucial to children's later development that the foundation skills be laid between two and one-half to six years.

Movement Education and Motor Development

During the pre-school years, motor skills develop rapidly. This is a critical period for the practice of the emerging phylogenetic skills of running, jumping, and throwing.

This time is important for the development of fundamental catching, kicking, and striking skills, which, for developmentally ready children, can be easily modified by specific practice. This is also a critical period for the development of proprioceptive or kinesthetic sensitivity. There is evidence to support the notion that mastery of these elementary skills helps children acquire more complex abilities later. The underlying idea is to capitalize on developmental periods when children most readily learn.

Perhaps the most persuasive argument for planning a movement education program for young children is that motor development should not be left to chance. Because there is a reciprocal relationship between motor skill use and development, carefully designed programs can and should be planned for this age group. The ability to use emerging psycho-motor skills is facilitated by encouraging, even demanding, their use. Movement education problem solving helps children discover how the body can become an effective, efficient, and expressive instrument. Yet the act of discovery is so individualized and personal that its consequences are more likely to be remembered than when some fact or movement has been explained or demonstrated.

Physical activity, enhanced by movement education, has both a direct and indirect effect on physical growth and motor development. The nourishment of cells of the growth plate of bones depends upon their blood supply; activity increases cardio-vascular circulation and increased vascularity, and together with a mild degree of stress, stimulates physical growth. The functioning of all vital organs is facilitated by activity, concomitantly enhancing motor development.

Other motor developments are increased body and spatial awareness, and concepts of direction and laterality. Laterality is defined as the internal awareness of the left and right sides of the body. Directionality extends the concept of laterality into space. After one is aware of the left and right sides of the body, kinesthetic information about the body in space can be matched with visual information about objects in the environment. A sense of directionality allows one to contact and manipulate objects, as in catching, kicking, or reaching. Body image is an awareness of the body in relation to other objects, and to the space needed for various actions. Movement education is particularly geared to develop body awareness.

Movement Education and Children's Need for Movement

Young children's need and desire for movement is central to at least five basic concepts: survival, discovery, control, expression, and enjoyment. Their need is particularly strong at this age because children's physical, psychological, and intellectual orientation is motoric. Movement, often very strenuous, is what young children are all about.

The quantitative aspect of moving to *survive* is rarely in doubt among pre-school children in nursery schools in our culture. Although there is little qualitative research on children of preschool age, the relationship between selected strenuous physical activities and cardio-vascular endurance for older children is well documented. Physical activity has a profound impact on body composition; it develops lean body mass at the expense of fat in both boys and girls. Thus movement enhances fitness.

Children move in order to *discover*. Both the act (process) and the outcome (product) are important. Between the ages of two and one-half and six, children discover what the body can do; they discover what it feels like to run fast, how to move along different pathways and directions, and how to change the size of their movements. These developing cognitive and physical abilities help children adapt to the diverse conditions of the gymnasium or playground.

Understanding what it means to *control* the body in space, on and off apparatus, when jumping, landing, balancing and sliding is another major objective of movement

education. Learning to control balls, hoops, ropes, and other manipulative equipment is yet another dimension of skill acquisition.

Many children find moving to communicate or express ideas or feelings pleasurable and natural. Because they are particularly uninhibited during these years, it is fitting to develop their dramatic ability fully. Encouraging children to move for the sheer joy of running or jumping takes on added significance when we become aware of the crowded conditions in which so many children are forced to live and play.

Movement Education and Self-Confidence

The feeling of self confidence grows out of very personal experiences. It begins early and has its roots in motor behavior and physical activity. How it develops is significantly influenced by the way persons and the environment support autonomy in motor activity. Movement education is predicated on the notion that children will find their own way to perform a task or solve a problem. We have just begun to attend to an environmental setting and teaching method that encourages self directed learning and intrinsic motivation. Movement education is such a method.

Children's total feeling about themselves, composed of obvious and subtle components, is related to performance in motor activities. These include body image, body size, and general self-confidence. Often more important than how children perform is how they feel about their performance and what they choose to do next. Movement education contributes to self confidence because it cherishes the children's solutions rather than the teacher's. This, particularly at this early age, is one of its major strengths.

Movement Education and Competence

Hand and hand with self-confidence is a feeling of competence. White (1960) states that the drive for competence is on a par with such basic drives as love and hunger. As children's sense of "me" emerges, they differentiate themselves from others and from objects in the environment. They become aware of the extent and limits of their bodies by moving. They reach out their arms to define the limits of their personal space. They bend their fingers to discover their articulation. They explore what each part of their body can do, what it is called, how it moves, and how it moves in relation to other body parts. Soon the notion of the competent "ME" becomes increasingly significant.

By the age of five many children are very competent in handling their bodies. A movement education approach, concerned with developing knowledge of what the body can do entrances both the knowledge and skill components of the children's ac-

tivies. To be competent at this age means to be developmentally effective, to be able to run, jump, swing, climb, and hang without falling or getting hurt, and to make judgments about what activities can be engaged in with safety and success.

Equally important to competence is children's ability to make decisions, to overcome obstacles, and to solve problems. The feeling of competence derived from interaction with the world — the gymnasium, playground, or other challenging physical environments — is seen as central to children's motivation. The competent mover is motivated to move and so becomes more competent. Just as "success breeds success," so it would appear that competence generates increased competence.

Movement Education and Learning

Children between the ages of two and one-half and six are intimately involved in learning how to learn. They learn first about how their body moves; then, as their mobility increases and their environment expands, they learn many other things. Intrinsically curious, they test and try, poke, push and pull, climb on and jump off, each in their own way. Because movement education focuses on both process and products of learning, children actively employ cognitive learning skills as they develop their psycho-motor skills. They explore, discover, select, and repeat while they practice and refine fundamental locomotion and manipulation skills.

Curiosity is an important aspect of learning. When self-confident climbers become curious about heights, they discover the top of the trestle tree. Curiosity and discovery engage learners in further learning. Both intellectual and motor development occurs when each successive discovery is more delightful, enjoyable, and intrinsically satisfying than the last. When children are free to explore, even in a seemingly non-purposeful way, new motor experiences become self-validating and self-justifying.

The problem solving and decision making aspects of learning also can be enhanced by a movement education program. When the task of finding a way to go under a piece of apparatus is given them, they may decide to go head first on their bellies or feet first on their backs. Will they slide or wiggle through? Learning to make judgments of size (larger, smaller), space (up, down, and sideways), and distance (near-far), children develop critical thinking skills. The principal method of movement education involves children in just this kind of mental gymnastics.

Movement Education and Freedom from Fear

Because of the dominance of the psycho-motor domain at this period in children's lives, they have a strong need to achieve a minimal performance level in fundamental skills. Fear, a deterrent to improved motor performance, tends to hold back their progress. It makes them apprehensive about trying anything new or different. Children

engaged in a movement education program are not all expected to perform in the same way, so there is a moratorium on fear of failure.

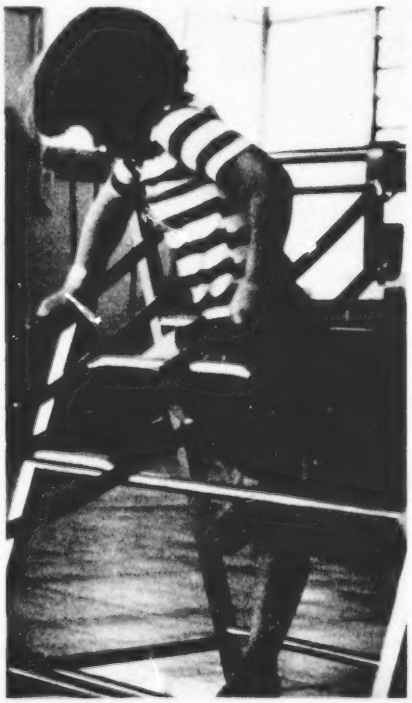
Freedom from fear is closely allied to the need to become autonomous, to be able to do things for oneself. One frequently hears young children say "Let me do it *myself*!" But they must also learn to be realistic about the physical activities they choose, for they sometimes attempt skills, like climbing, which could result in injury. Inherent in a movement education approach is learning about what one can and can't do safely. Knowledge of one's ability can be a deterrent to being fearful. Fear which children learn from over-protective, hence unrealistically inhibiting adults, though different from the fear of failure, can be equally devastating.

Movement Education and Openness

Children have the need to be *open*. Within the context of this book it means that children should be able to react to a wide range of physical, particularly gross motor, activities. Movement education, predicated on divergent or lateral thinking, is more likely to expose children to a variety of motor experiences than a traditional program. Because most children are psychologically more open at this age than later in life, it seems wise to provide a program which both fosters openness and lays the groundwork for further development of this valuable trait. If children are to express themselves with self-understanding, they need to be open. Self expression requires not only openness, but self-awareness as well.

Movement Education and Readiness Skills

Although "readiness" is a rather nebulous concept, it is used here to mean preparation for formal schooling. One experienced first grade teacher said she first expected children to listen to, repeat, and follow simple directions. Attending with eyes as well as ears, replicating verbally, and demonstrating understanding by doing, are skills easily practiced by young children participating in movement education. Watching someone else crawl under a stool, describing it simply, and then imitating it often provides "lull in the day's occupation" from which both child and teacher profit.



It is particularly important for some children to learn to discriminate between words, commonly called "critical pairs," such as hop and stop, and eye and thigh. These children need to hear how these words sound differently, to pronounce them discriminatingly, and to understand that they mean two dissimilar movements or things. A vocabulary of movement terms can be initiated in this way.

The wealth of usable and learnable words depends almost solely on the teacher's imagination and ability to incorporate them into lesson planning. The

author's six year olds developed a list of "go words" which included locomotor and non-locomotor words as well as creative ones like squiggle, squirm, and twirl. Writing words on a blackboard helps children to see words they hear and perform and enriches learning by using three different sense modalities. Some five year olds are fascinated to do the writing.

As the wonderful world of colors and shapes permeates the gym, children learn to select a blue ball, a red bean bag, or a yellow hoop, and develop a vocabulary of colors. The author, for example, created yellow circles, red and white horizontal stripes, blue vertical stripes, and green diamonds on 4 × 4 × 12 inch pieces of wood later used as obstacles to bounce over or dribble around. The shapes and colors were incorporated in the directions to children.

Learning to focus on, track, and move the body to intercept an object are successive skills developed during these ages. Object visibility is particularly important in acquiring these skills. Having and identifying bright objects helps children discriminate shape, speed, direction, and size critical to learning to manipulate objects. Learning names and colors facilitates discrimination.

Vocabularies also can be augmented by counting skills. Partly through the teacher's conscious use of numbers in their various categories, most children will imitate the words. "David, you may be the one (subject) to take a ball." "Pick up one (adjective) rope." Both teachers and children can readily use and differentiate between cardinal (basic) and ordinal (indicating order) numbers. "Children, go one at a time." "Sean, you may go first." A movement education program also helps children learn prepositions. "Find a way to go under one piece of apparatus and over another." On, off, around, through, and under are ones even the youngest learn quickly. Qualify these by asking children to go over without touching, or under with the feet leading. Cognitive learning which takes place in the gymnasium should not be underestimated; at no time in life is learning so rapid and so pervasive.

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2 WHAT

Jane Young

Content

The task of identifying the content of movement experiences for pre-primary children seems relatively simple because young children move almost as naturally as they breathe. Prescribing experiences for them seems easy; turn them loose and away they go. But, simplicity can be an illusion. Providing meaningful movement experience for preschool children requires a profound knowledge of how movement abilities develop and the ability to observe children's movement patterns to assess their developmental stage. Is a child using the step-down form of jump, for example, or does she/he show a vigorous jump down from a two-footed take off to a two-footed landing? Keen observation of children's skills is a pre-requisite for planning their experiences. Sensitivity to both the developmental form involved in the skill, and length of time children are willing to practice is also necessary to prevent intruding upon learning experiences in which children are already absorbed.

The Nature of Movement: A Movement Education Approach

The Content of any educational prog.am is determined by (1) the needs of particular children, (2) the objectives of the program, and (3) the nature of the subject matter. The focus of this chapter is on the latter: movement as *content*. What are children learning about movement at this age? How do we analyze movement? When planning a movement education program we must consider:

- What do children already know or need to know about their own movement?
- What do we as teachers need to know to help children develop the necessary knowledge of movement?

FIGURE 1

HOW DO I MOVE?

TIME

How fast or slowly can I move?
Can I move as though I am in slow motion?
Can I make a movement go on and on slowly for a long time?
What is the most sudden movement I can make with my whole body?
Or with one arm?
Or with my feet?
Can I change from doing quick, sudden movements to slow ones?

SPACE

How many ways can I use the space I move in?
Can I move through space taking up very little of it?
Can I get from where I am standing to the wall in a straight pathway?
How can I use a lot of space as I move.?
How do swinging movements make me use space differently from walking movements?
Or punching movements?
How high or far can I jump?

FORCE

How loudly or softly can my feet touch the floor?
Can I make my whole body move strongly?
How can I move so I am as light as a feather?
Or as heavy as an elephant?
Can I move strongly then lightly using only my hands and arms?
Or just my feet and legs?
How hard can I push off the ground to get high in the air?

FLOW

What can I do that is easy to stop or "freeze"?
Can I spin around and stop quickly?
Can I roll more than once without stopping?
Can I jump and run and roll?
Or jump and roll and run?
How can I move so I can stop quickly and easily?
How can I move so it is hard to stop?

Teachers of preschool children can use this movement language to construct a framework within which to plan for the development of children's abilities. The degree to which certain specific concepts of movement, such as balancing, need attention may also be noted. Teachers need to understand the movement factors in dance, gymnastics, and manipulative skills if their children are to internalize the concepts involved. The idea of how strongly or lightly one can move, for example, may be applied to traveling on, over, or along a balance beam or low box as well as to dancing about leaves moving in the wind.

Rudolph Laban provides a framework for analyzing movement that even very young children can understand. He identifies four movement factors—space, time, force, and flow—universals of all movement. *Space* has two aspects: personal space which the body occupies and general space which is outside personal space and includes areas around, under, and inside equipment. Working with space concerns one with how the body moves through it using directions, pathways, and focus. *Time* deals with the elements of tempo—fast and slow—and rhythm. *Force* relates to the strength and effort of movement, whether it is heavy or light, weak or strong. The combination of force and time produces movement that can occur suddenly (percussive) or slowly (sustained). *Flow* is either continuous or discontinuous.

Answering the question "How do I Move?" forms the basis of body management activities with which this age children are vitally concerned. When running, for example, the child moves through an area (space) at a certain rate of speed (time) depending on how much effort (force) she/he uses. The running action manifests a continuity of action (flow) that makes it easy for the child to control (bound flow) or difficult to stop (free flow). The movement factors of time, space, force, and flow in Laban's framework help clarify how movement can be changed. That is, the running can be faster or slower, heavier or lighter. The steps can be larger or smaller.

How can these movement factors be elaborated into a comprehensive program? The questions on Figure 1 can become a basis for structuring movement tasks. Questions lead both teacher and pupil to explore and discover what children can understand and do. Constructing learning tasks which help children progress in movement mastery takes time and experience. Older children will be able to grasp many of these ideas; younger ones may imitate what they see. Direct questions to individual children or to a small group of older children. Developing both listening and looking skills — basic skills which children need — is fundamental to the movement education approach.

The *what* of movement education also encompasses (1) fundamental movement skills, (2) manipulative skills, and (3) expressive skills. These three categories organize movement experiences for preschool children.

Fundamental Movement Skills

During the years of emerging locomotor and manipulative skills, preschool children need many opportunities to explore and develop their own movement patterns and capabilities. They will spend time and energy mastering such basic movement abilities as running, climbing, jumping, galloping, and eventually hopping and skipping. They often will endure sustained practice to achieve mastery if they, rather than someone else, determine practice length and choice of skill. Young children, easily bored with inactivity, tend to be seekers and explorers. They illustrate how motor-oriented people behave, seeking sensory stimulation in the environment, and creating it if none seems to exist.

Movement is an enjoyably sensuous form of self-stimulation. We see this as we watch children rolling down a hill and scrambling back up just to roll or slide down again. Later,

they will perform similar activities on a tobbogan or skis. Children seek and enjoy fast movement. They cherish the weightlessness of swinging and the vertigo of spinning. This proclivity for stimulation-seeking, which research supports as stimulating the brain, should be used to full advantage as a built-in teaching aid. A question such as "Who can make a twisted shape while hanging on the bars?" may bring forth a variety of movement responses with the alacrity teachers dream about.

Improving children's movement ability, therefore, requires that we encourage their natural seeking behavior so they will attempt new tasks while providing opportunities to practice skills already learned. Though progress toward mastery of movement can occur spontaneously, realizing the potential often requires some teacher guidance and planning. Most young children have an inner sense of their own readiness. Given a relatively open learning climate, children feel free to find, work at, and improve their own level of ability. Pre-primary children, essentially egocentric, do not respond readily to peer pressure. When they say "I don't want to do that," peers and teachers accept it as fact. Yet teachers need to circumvent this response if a learning task is deemed important.

Variety of individual responses, one criterion for judging the educational content of a movement program, may be compared to a child's increasing functional vocabulary. Personal movement words are often the first ones children learn. Increasing body management skills to include more competent and expressive movement is another criterion. Compared with later stages of physical development, children grow and change at a phenomenal rate during the pre-school years. This growth and change necessitates practicing of a variety of motor skills as the children adjust to their changing body size, weight, strength, length of lever, interests, and needs. They want to answer the question "What can I do?"

Manipulative Skills

Manipulating objects, an important part of the developing child's movement ability, is consonant with later participation in games and leisure activities involving balls, frisbees, rackets, or bats. Preschool children have been touching, grasping, releasing, throwing, flinging, rolling, and trapping objects for some time. From an early age they have been avoiding chairs, tables, doors, and other obstacles. They love chasing and fleeing games, and many have even learned to dodge each other or a parent rather well. Most children will have experienced climbing on and jumping off furniture. As teachers of children, we need to facilitate these skills, rather than to inhibit them. As Jerome Bruner suggests, we do children a disservice when we imply that activities we propose are new, as though they were unrelated to something children have been doing all along. He notes that children can develop concepts through such early learning if these also are reduced to easiest learning terms.

The same can be said of movement. We need to build on the manipulative abilities children bring with them and move them toward competence in others. Figure 3 presents basic pre-primary learning experiences in the manipulative area.

Basic manipulative experiences, as well as those which develop fundamental movement skills (and some argue that manipulative skills like throwing, catching, and kicking are fundamental) should also focus on time, space, force, and flow factors. The variations in performance which ensue, such as being able to bounce a ball at different heights or in varying directions and pathways, relate to games children will play when they are older. Competence in selected skills, such as throwing and striking, derives from a broad base of manipulative experiences already familiar to children. Just as children need practice in verbal expression, so do they need to purposefully manipulate small, medium, and large sized objects. The comparison between motor and language development is a cogent one. They usually occur concomitantly, imitation is potent in their

FIGURE 2

WHAT CAN I DO?

BODY IMAGE

Identification of body parts: naming, locating, and moving in response to set tasks.

Knowledge of size

How big am I?
How big are my hands when compared with my feet?
Can I make a large circle with my arm?
Will my leg make a larger circle?
Who/what am I bigger than?
Who/what am I smaller than?
Who/what is the same size as I?
How can I make myself bigger? Smaller?
How high can I stretch while standing on the floor?

BODY ACTIONS

Locomotion

How can I travel from one space to another?
Can I turn as I go across the floor from one side to the other?
What are all the ways I can move on my feet?
Can I roll from one place to another?
Can I roll in different directions?
Can I roll with different parts of my body leading, such as my knees, my seat, or one shoulder?

Non-locomotion

How can I move my body while staying in one place?
How tightly can I curl my body?
How far can I stretch to the side?
Can I curl and then stretch different parts of my body? One at a time? With different parts leading?

Shape

Can I make a *rounded* shape while sitting on the floor?
What does a *stretched* shape (or *wide*) look like when I am lying down?
Can I make a *straight*, narrow shape while standing on one foot?

Range of Motion

How far can I reach?
Can I make different parts move far away from each other?
What are the biggest movements I can make? What are the smallest?

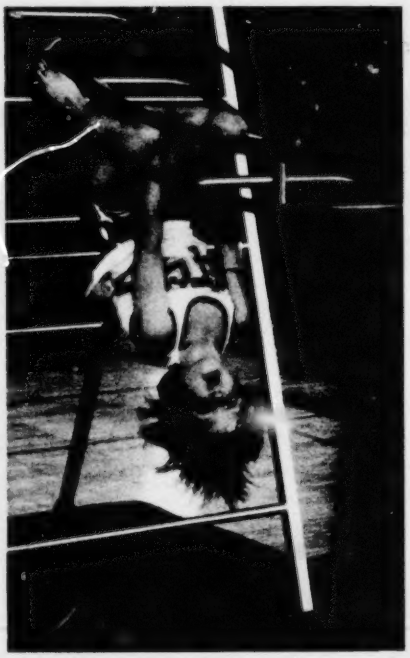
acquisition, and practice is more relevant than instruction. Teaching which focuses on improving children's performance may be appropriately individual.

Preschool children are still egocentric, and much of their motivation stems from a desire for continued pleasurable experience rather than a desire for excellence. For many two to five year olds, throwing or catching *better* is less interesting than throwing a bean bag *hard* at the wall to hear the satisfying slap as it hits, or attempting to throw a ball *over* a high fence, or *through* a slot in a geodesic dome. Thus the teacher's task is to structure a stimulating environment through which improved throwing, catching, kicking, and striking abilities can result. The teacher plays a crucial role as a behavioral engineer. Many younger children need an adult to roll a ball back and forth. Older ones may be amused and challenged by tossing it through triangular holes in a board or knocking down a row of bowling pins. When children this age may choose large or small balls, most first choose a 16 inch ball which they can throw, bounce, or balance on with amazing ease. They will also kick it, either deliberately or inadvertantly, and follow its path intending to control or kick it once more. This visual tracking skill is important in games situations when they are a little older, as well as a forerunner of the soccer, hockey, or basketball dribble.

Four and five year olds are mature enough to learn to handle paddles and improvised hitting implements. Watching a balloon descend and sending it skyward happens slowly enough for many young children to gain some pleasurable control. A small hill is a wonderful place for tossing and retrieving. The more children roll or bounce their ball under, over, and through apparatus, the more they enlarge their understanding of the use of free space.

Large Apparatus

To gain some control over the environment, children must deal with the relationships between themselves and objects. Learning to maneuver along, over, under, through and around objects helps children learn to gauge distances and estimate size and relationships. For most children a gymnasium is an exciting place, especially the second time they see it. For others it may appear "a jungle," a puzzlement to be explored first with the eyes or from the safety of someone's lap.



Although large, expensive equipment is not necessary to provide stimulating experiences for these ages, it is generally more exciting and challenging than what is usually available. Low stools, boxes, and balance beams are ideal for climbing on or jumping off; but an uneven parallel bar, with an attached ladder, is infinitely more inviting. Many new play-learning center designs, or parent-designed equipment are also sturdy, inexpensive, and sufficiently complex to promote a variety of body management activities. (7) Many of these designs provide for hanging and swinging activities important to developing upper

FIGURE 3

BASIC MANIPULATIVE ABILITIES

ABILITY	VARIATION	OBJECT	OTHER CONSIDERATIONS
Rolling	to wall, with one or two hands; to partner; through spaces made by hoops, blocks & wands; around self	various balls, different textures and densities	Encourage exploration: what happens if? (if you roll it hard? backward? if you roll it with the hand you don't draw with?) Provide a variety of spaces to roll the ball through or around.
Dropping and Catching	dropping from two hands; one hand; dropping off a bench or table and then catching it.	a lightweight vinyl ball, or balloon (much harder to control if you want it to bounce, but moves slowly enough to be caught before it reaches the floor.	This is a prerequisite to bouncing and catching. Provide for a lot of practice in this
Throwing	overhand, underhand	balls small enough to be held in the hand	Encourage children to throw hard by placing targets far enough away to elicit this.
Tossing	to self; high, low, far; softly, strongly; straight	balls of varying size, color, and consistency, such as fleece, sock or newspaper balls; bean bags	Use of lightweight (vinyl or plastic) balls help children retrieve them after the toss. Emphasize *tossing* and *catching* separately.
Hitting/ Striking	with different body-parts; with two body-parts; hands only; with paddles; with large plastic bats; off a cone or tee	balls of varying size and consistency (see "tossing"); bean bags; hoops (striking a hoop to keep it rolling); badminton "birds"	First emphasize striking with hands, then progress to using implements. Toss the ball to the child at a moderate speed, but find ways for the child to work alone at this task. Provide variations so the child can strike the object *over* a net, *along* a track, or *under* a chair. Encourage a wide range of motion to develop good striking patterns.

Kicking	with different parts of the foot; from a stationary position; running up to a ball	balls of varying size, consistency, color, texture When introduced, targets should vary: (a) space provided by two "goal posts" (blocks, bowling pins) a space provided by a hoop or tire to kick through; (b) a target to be hit or knocked over (a bowling pin or box); (c) a target on a wall or fence	The child should make decisions about the distance from the target or changes in the size of the target. If the child seems content *not* to challenge himself, change the environment or the type of target.
Hand-Catching	from different heights (high and low); balls tossed, thrown, or bounced by self, or by another person; catching "on the fly", with two hands, with one hand; reaching to catch; jumping to catch	bean bags; balls of varying size, consistency, and color	Using soft, large balls (fleece or plastic) encourage the child to keep looking the ball rather than turning the head away. However, using only a large ball tends to cause "trapping" the ball against the body and inhibits development of more mature hand-catching patterns.
Bouncing	using different body-parts; using both hands at the same time; using first one hand, then the other; following the ball; in own space; dribbling among objects; bouncing strongly and lightly, low and high, fast and slow; bouncing from different bases of support; bouncing while skipping, jumping, hopping, or running.	balls of different size, color; watch for "roundness" as light vinyl balls sometimes bounce at odd angles because they are not truly round.	Provide many opportunities to practice simple bouncing before introducing other factors into the task, such as obstacles for dribbling around, or performing different locomotor skills while dribbling.
Basic handling activities	Picking up; placing; transferring from one place to another; sprinkling.	building blocks; interlocking blocks; "nesting" blocks and toys; sand play objects.	Children need a variety of tactile and fine motor experiences to develop competence.

body strength and flexibility. Learning experiences for using apparatus should include:

- **Weight-bearing**
  - Supporting weight on or by various body parts.
  - Supporting weight on or by combinations of body parts — hands and feet, seat and elbows, head and feet.
  - Supporting weight on or by one, two, three, or four body parts.
  - Arriving on the equipment safely in a variety of ways.
  - Leaving the equipment safely in a variety of ways.
  - Landing safely and softly on the floor or ground.
  - Balancing on different body parts.
  - Hanging by different body parts — hands, hands and feet, hands and knees.
  - Swinging from different body parts — hands, knees, hands and feet.
- **Weight transfer**
  - From one body part to another.
  - Moving with light (soft) steps, jumps, or hops.
  - Rolling in different directions along or over the equipment.
  - Rolling with different shapes of the body.
  - Rocking on various body parts such as a rounded back or abdomen.
- **Body actions**
  - Stretching, curling, twisting and turning on, over, around, under, and along the equipment.
- **Body shapes**
  - Balancing on different body parts while making twisted, curled, stretched, flat, or long shapes.
  - Making a rounded shape while lying on the floor.
  - Making a stretched shape, standing.
  - Making a straight, narrow shape while standing on one foot.

Expressive Activities

Young children are very expressive. Their eyes, faces, body positions and gestures send a continuous flow of information to the astute observer. Much of this non-verbal expression is unconscious; usually it is immediate. Facial expression and body movement reflect an instant response to a thought, image, sound, song, or feeling. In their interactions with other children or adults, children's non-verbal expression frequently precedes verbalization. They show how they feel long before they can explain it. Because children also move before they speak, they respond to learning experiences through expressive movement. Later they will speak to facilitate or inhibit movement rather than move to explain it.

Providing satisfying experiences in expressive movement for children often seems difficult to teachers who have had little or no dance training. Expertise in performing dance movements is not necessary for teaching expressive movement, although the confidence and ideas that accompany such training or expertise are helpful. It is far more important for the adult leader to understand the developmental abilities and needs of children, to see the world through their eyes (for stimulus ideas), and perhaps most important, to accept the ideas implicit in children's movement expression. Young children — easily pleased — are delightful audiences. Thus the teacher's task is to stimulate the children to express their feelings and ideas through movement and to act as a catalyst for their development.

The creativity in "creative dance" stems from the mover's ideas. A creative teacher, capable of recognizing student creativity, is an asset. Many successful dance teachers freely admit that students' creative responses help develop their own creativity.

Creative dance should constitute the major expressive movement experience for preschool children. Singing games are fun, but if their focus is on singing, not movement, they easily become a series of ritual actions to accompany words. Children can and do gain much pleasure from learning them, however, and they can teach about body parts ("put your right hand in"), phrasing, and other important musical structures.

Few folk dances are appropriate for very young children. Dances now identified as "children's folk dances" originated in adult activities and interests, and tend to have little meaning for young children except as a repetitive, rhythmical activity. Most dancing "folk" were adults! For childen to feel "I can dance" they sometimes must be allowed to do their own dancing.

Thus children should spend a great deal of time developing a sound foundation for expressive movement, the better to communicate their feelings and ideas. Children should dance with and without music and with and without accompaniment. They should move to the sounds that they themselves make, (voice, sounds, clapping), or to instruments the teacher or they can play. The cymbal, drum, triangle, block, or a tambourine provide infinite variety of sounds to move to. Directions for making rhythm instruments simple and inexpensive enough to provide one for each child are found at the end of this chapter.

Dance experiences that focus on "now the body moves" also can be found in other reference books which provide principles, concepts, and sample learning experiences.

Me and "Let's Pretend"

During the preschool years children experiment with pretending. As early as age two, children pretend they are mothers and fathers, siblings, or animals. They pretend to have lunch, produce an imaginary friend to boss about or blame for their shortcomings or simply to "play with."

Creative dance experiences, however, need to go beyond "just pretending." Children can look at a tree blowing in the wind and experiment with bending and swaying movements with the whole body or with different body parts. This is quite different from "being a tree," in which rather rigid movements result from fixing the feet in one place in order to move "like" a tree. By contrast, looking at the tree and identifying the components of its movements — lightness or power, bending more one way than another, leaves shaking or turning — children become acute observers, more aware of movement possibilities.

Stereotyped movement often results from phrases like "Let's all be elephants." Children copy what they see others do. Given the above task, most children lock their hands in front and, bending forward, walk in slow, stiff-legged steps. Consequently, they totally miss the wonder of the amazingly graceful gait of a huge animal and the power and flexibility of its trunk. Deprived of a measure of awareness, their experiential information is less than real. A more meaningful request might begin "Let's watch how the elephant's trunk moves. See how it can curl and stretch in many directions. Let's try to move like that using our *whole* body." This task can lead into a series of curling, stretching, even twisting experiences that help children discover their movement capabilities. Try as we will, we can never be as good an elephant as the elephants themselves. Merely "being elephants" has a built-in failure factor that has no place in children's educational movement.

Successful expressive movement experiences focus on what children can do, how they move, and what they feel. Performing movements that show "I am happy today," "I am sad, tired, a little bit afraid," or "I'm feeling o.k.," are more related to children's daily living. With this beginning, an imaginative, short movement sequence might evolve to "Our Happy Dance" or a comparable dance with a different feeling tone.

Teachers who wish to develop a sound content base for expressive movement can find help and ideas in the references and resources at the end of this chapter. Teachers who are beginning to use problem-solving and movement exploration should feel free to begin with experiences of five minutes or less in length. Pre-school centers often have more flexible schedules than public school classes, and a five to seven minute movement activity related to other classwork, can be a worthwhile educational experience. When teachers do not have to be concerned about keeping a lesson going for 15 or 20 minutes, they can more easily accommodate the movement experience to the child's needs rather than the other way around. The result will be movement with meaning and a happy voice announcing, "Look what I can do.!"

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3 HOW

John Fowler

21

Teaching

Because the needs and characteristics of preschool children are distinct from those of elementary school age children, a program for them cannot be merely an adaptation of the usual elementary physical education program. These youngsters seldom require motivation, and they are so young that unless there are extenuating circumstances, they have not yet established "wrong" movement patterns. They have yet to learn to sit still for an extended period; they wiggle, shift, stretch, squirm, and sprawl. Their orientation is to move.

Human movement is meaningful. How then can we develop, or continue to enhance its meaningfulness as children grow and develop? The process involves:

- accepting and valuing the young child's spontaneous movement;
- expanding the psychomotor repertoire through meaningful physical activity;
- developing a sense of competence in the fundamental skills of stability, locomotion, and manipulation;

- challenging the child to active manipulation of his/her body on large apparatus.

Movement Education and Discovery

The preschool years are ones of learning to get along with others, learning to take turns, to share, and to work together. Young children are exploring who they are and what their world is like, so teachers begin by letting them explore. Since exploration leads to discovery, teachers can play a major role in facilitating this discovery learning. This is done by (1) structuring the environment — putting materials, equipment, apparatus in it specifically designed to help children learn things teachers feel they ought to know; (2) asking questions directed toward specific learning, and; (3) reinforcing behaviors which indicate learning has taken place.

The development of language and attending skills also determines how teachers work with young children. Facilitating the gradual shift from the child-centered world to a peer and adult-centered one is a major motive for a pre-school program. Young children function better in small groups; as they grow older the size of the group can increase, but one-to-one relationships and interactions provide a solid foundation for a movement education approach.

If a gymnasium has been set up specifically for young children, they begin with discovery. They swarm like bees over apparatus which challenges them to move inventively. There is practically no limit to ways they explore a single piece of equipment if it strikes their fancy. The creative teacher is quick to note what makes apparatus inviting, and equally quick to change that which is not.

How to present material to this age group is inextricably tied to *what* to present. Apparatus which provides opportunities for climbing, swinging, hanging, jumping, sliding, and balancing is inviting to most children. Offered balance beams of different

heights and angles of inclination, children will find one for which they are developmentally ready. Perhaps on subsequent days they will try higher ones, but within this setting there is little need for instruction.

As children develop a vocabulary of movement terms, teachers can change their roles from observer-facilitator/prompter to presenter/interrogator. The first role, based on letting children explore, depends upon teachers' ability to note carefully what children are doing on each piece of apparatus, with equipment, or with their bodies. A structured environment which invites exploration falls within the scope of the movement education approach. Using the guided discovery method, the teacher — with general goals, concepts, or skills in mind—observes each individual's response, and decides how best to help each child's skill development, verbally suggesting activities the child might try, such as "Let's go on the ladder." Sometimes young children will move or change an activity if the teacher simply changes position.

Movement Education and Problem Solving

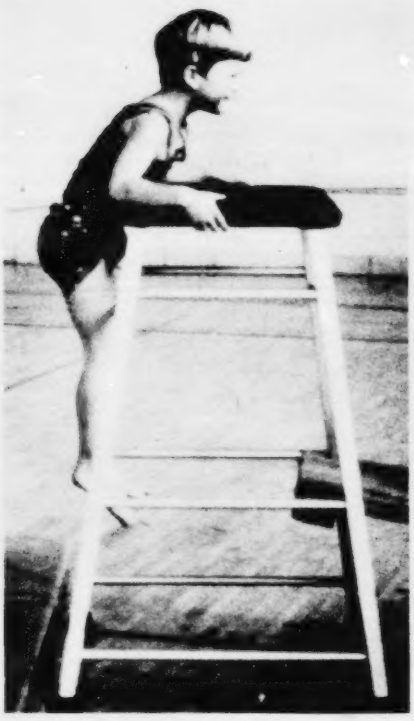
The second approach, problem-solving, is more open-ended than directing, but more focused on observing and fact finding. Problems and tasks are set, and children may respond in any appropriate way they like. Many different, equally acceptable movement answers are possible. The teacher and child mutually select ideas from the children's movements and develop them in what is termed "a teachable moment." Children will often initiate many responses acceptable to the teacher who offers suggestions, praises, and helps develop them. The teacher is audience, facilitator, elaborator.

With either method the process can be described this way: *exploration* leads to *discovery*; further exploration leads to further discovery. Both teachers and children become involved in a spiralling learning process. The activities, movement patterns, skills or concepts that are discovered can be *analyzed* by teachers with the following questions: "What is happening to the child's body?" "What can happen next?" On the basis of the latter question teachers and/or children can, *analyze* what happened ("What happened to your knees when you jumped?"), and *select* movements for *repetition* ("Can you do that again?", "Choose what you like to do best and do it again?") or *imitation* ("Can you bend your knees the way Tommy did?"). At this point in skill learning, *repetition* is necessary to develop quality movement so any teaching method should include plenty of opportunity for practice and play.

Movement Education and Guided Discovery

Using the guided discovery method encourages creativity because the teacher asks for, acknowledges, and uses children's original movement ideas and activities. Both questions that ask children to think and those which ask them to observe can be used. These may lead to "teachable moments" during which the teacher can simply discuss the benefits of exercise and activity. ("Why do you like to run?") Many opportunities occur for integrating movement with other aspects of the children's day. An action vocabulary, for example, can be encouraged and developed through meaningful verbal interactions.

As teachers plan and teach a movement education program to young children, other resource materials will assist them in developing a rich variety of activities. Although suggestions for further reading are included at the end of the chapter, material should be adapted to take full advantage of each teacher's unique capacity to evoke creativity. Once teachers and children begin to use exploration and guided discovery, the program has endless possibilities. Its rewards will be in seeing children improve motor skills performance, gain self-confidence, work and play together, develop a positive self-concept, and, above all, have fun.



How Guided Discovery Works

The following suggestions illustrate how jumping skills might be developed using the guided discovery method.

Exploration: find some objects the children can jump over, such as milk cartons, wands, ropes, and low balance beams. Automobile tires or innertubes also can challenge children to jump in and out of spaces, or on and off surfaces. Chairs, wooden boxes, a set of steps, and specifically designed apparatus can give children practice in jumping down from different heights. Children can make different shapes with jump ropes and then jump in, out, and over the shapes. Hop-scotch markings on the play area can be used as well.

Discovery: during this first process children and teachers find (1) kinds of objects which can be jumped onto, off, over, (2) different ways of jumping, and (3) different dimensions of the jump. Each of these discoveries can be pursued in a variety of ways.

"I saw you jump off a box, can you find something different to jump from?"

"Last time you jumped facing front, did anyone think about jumping sideways or backward?"

"I see someone jumping very high. Next time can you jump wide?"

"Put the hoop (rope, tire) on the ground and find some different ways to jump in and out of it."

Selection: this process has two parts. Children can be asked to choose a movement ("Choose the way to jump which makes you go highest.") or teachers can select some aspect of jumping to learn about ("What do you think made you go so high?" "Everyone find a line on the floor and show me a way to jump over it."). Selected jumping patterns can be also identified for *repetition* and/or *imitation*. ("Can you jump over the line the same way again?" "Susie jumped all the way around without falling down. Can you try it?")

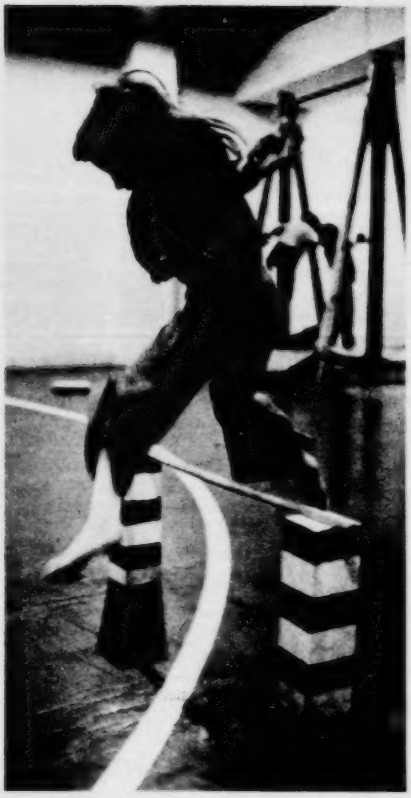
Here again teachers observe, praise, and use children's ideas and efforts for further exploration and discovery. Children can discover how to jump high, to turn around, to land softly. The quality of the landing after the jump should be noticed. What helps to make landings soft can be briefly discussed, but most time should be spent in practicing jumping and landing. Children are so light that most of their landings are naturally soft and they seem to instinctively land without getting hurt.

Further Selection: As children become more proficient in jumping activities, the height and difficulty of the jumps can be increased. Children can jump and make a shape with their body. Individual progress guides much of the work at this stage. Children should be allowed considerable practice time, with as many repetitions as they feel are necessary for their developmental level of "perfection." Their interest and persistence will tell teachers when to move on to a different task or a new challenge.

A similar example of the process might be developed for the use of balls, which, incidentally, children find quite a challenge to jump over, bounce, and balance on as well as throw. Teachers can incorporate some of the following:

Exploration	"Get a ball and move it around the room using any part of your body."
Discovery	"I see some people using their feet; others are using their knees, even their noses."
	"Try to keep the ball close to you; don't let it get away."
Selection	"Let's see if you can find three different ways to move the ball."
	"Find a way to make your ball bounce high."
	"Who can move a little faster with the ball?"
	"Can you make the ball move in different directions?"
Repetition	"Who can show me the way she/he moved the ball?"
Imitation	"Can you dribble the ball with your foot as Tommy is?"

Observant teachers can point out different ideas that children might want to try based on what they see being done. Teachers should move around the group to help individual children develop their ideas, skills, and movement patterns. The same challenge need not be presented to all children at once as age, homogeneity, and skill of the children often differs. As individual rates of progress begin to show, and they do from the first day, teachers suggest different tasks for different individuals or for small groups. One of the greatest strengths of Exploration and discovery permits children to make use of what they are developmentally ready for. They select tasks they can do, succeed at,



and have a good feeling about.

As the children's vocabulary and ability to listen when surrounded by exciting equipment increases, teachers may move to guided discovery or problem solving. In fact, the teacher may choose a variety of teaching styles to suit the developmental levels of children. To make the transition from exploration to a more direct style or one with more specific behavioral goals, the children will first need to be able to:

1. Identify the different parts of the body. The teacher can have the children sit in a group, all in their own spaces, and respond to some questions.

"Let me see who can touch her nose."

"Can you touch your knees?"

"Who knows where his/her shoulders are?"

"Can anyone tell me the names of some other parts of our bodies?"

"Show me some ways to move your elbows."

In each lesson or activity period, the children can review the names and location of body parts until they can identify them readily. Singing about them is another way of identifying them and popular singing games like "Here we go Looby Loo" add fun. At the same time children learn that the body can bend, curl, stretch, and twist.

2. Understand the idea of relationships of people to people and of people to objects. Many relationships can be explored with a partner, but young children especially need practice in finding a partner quickly. The teacher can facilitate this activity.

"Can you sit *next to* someone else?"

"Let me see if everyone can *face* his/her partner?"

"How *far away* can you get from your partner?"

Teachers can help extend a vocabulary of relationships by using body parts:

"Put your nose *near* to your knees."

"Make your hands go *far away* from your feet."

Other important relationships are beside, behind, in front of, follow, and lead.

As children begin to use large apparatus such as balance beams, turning bars, and ladders, they will need to understand the meaning of prepositions such as: on, off, over, under, along, through, around, up, and down. The teacher can develop understanding through questions.

"Who can jump *over* the line?"

"Can you jump *out* of the hoop?"

"Show me how you can get *around* the bar."

3. Understand the meaning of adjectives which qualify movement: "different,"

"same," "another." The teacher will find many new words to introduce as the range and purposes of movement change and expand.

"Can anyone show me a different way to walk?"

"Can anyone think of *another* way to jump?"

Children will learn more from *showing* than *telling* (explaining) how something is the same or different. Although the ability to compare develops slowly, it is important and should be encouraged.

4. Begin to understand the movement elements of space, time, and force. As questioning continues, the idea of *opposites* introduces these concepts gradually.

"How *fast* (slow) can you walk?"

"Show me how slowly (quickly) you can sit down. Now get up and let's all move heavily (lightly)."

"Can anyone show me how to move backwards?"

"Try to move *close to* (far from) the floor."

These examples can be expanded by changing words such as fast, slow, medium, high, low. As "critical pairs," that is, words which sound alike (low-slow) occur, the teacher can enhance auditory discrimination by putting the words into a plan.

5. Develop a movement vocabulary. Action words like, run, skip, hop, and slide soon become easy ones for children to use. Slither, twirl, spin, sneak, chase, wiggle, and slip have great appeal. There is no end to the imaginative use of these words.

"Who can *slither* across the floor on her belly?"

"Who can *melt* like snow in sun?"

Organizing Time for Movement Experiences

The amount of time scheduled for a movement lesson or activity period will vary. If there is enough variety and challenge to keep the children involved and motivated, thirty minutes or more can be used. In a less structured but challenging environment, children will keep usefully active for an hour of more, although this may be too long for some two and one-half year olds. If children spend the entire day as they do in some preschool programs, they will need certain other times for unstructured free play. Once they know what they can do with small apparatus, children can work (play) on their own with supervision but little overt guidance from teachers.

A good way to begin each lesson is with a short period of exploration or free activity. Children find apparatus and equipment so exciting, particularly when this period follows one of quiet activity, that it is difficult to direct them. They will scramble over any available large apparatus such as balance beams, inclined boards, climbing frames, inner tubes, and turning boards. Apparatus that moves, such as ropes, is particularly inviting.

Children generally indicate when they are ready for the next phase of the period which might be to introduce some of the skills and activities described below. Most of these will be repeated, revised, and reviewed during the entire age span. Particular skills should be emphasized.

Locomotor skills — different ways of moving on the feet and other body parts.

Non-locomotor skills — activities involving balancing, curling or bending, stretching, hanging and swinging, twisting, rocking.

Manipulative skills — activities including throwing and catching, kicking, bouncing, hitting, or striking.

Rhythmic and creative dance — activities including moving to different rhythms or beats, responding to words and ideas, that suggest different kinds of movement to music or story plays.

Simple games — such as chasing games, small circle ball passing and rolling games, singing-action games, games children have created using small apparatus and possibly played with a partner.

Even with some of the youngest children a tapering off period can include asking questions like: "What activity did you like best today?" "Show me what you liked to do best." "Why did you like it?"

Putting It All Together

Combining all the previous suggestions can present a challenge to the teacher who is beginning to establish a movement program. An important early lesson for children is moving under control. The teacher can begin to develop this.

"Go and stand in a space all by yourself."

"Are you close enough to anyone else to be able to touch?"

"If you can touch someone else, move into a different space so that you can't."

"Now look around you. Can you see another empty space?"

"When I say go, I want you to move into it."

"Remember, space is all around you — even behind you."

"See if you can now move around the space, keeping as far away from other children as possible."

The ability to move and share space with other children will be useful in many ways. All games require using and relating within space. Further refinements occur as children move at different speeds, turn in different directions, move on different body parts or while lying down. Each introduces additional movement elements. The teacher can also make the size of the space larger or smaller and apply the movement elements as suggested above.

Activities can be performed on the floor with or without apparatus. Occasionally children can work cooperatively with a partner in passing a ball or a bean bag. Individuals, pairs, or small groups of three or four children can work at apparatus stations or learning centers using all kinds of equipment and ideas. Either the teacher can suggest specific activities for the children to try, or the children can invent their own at stations such as the following:

Several hoops on the floor — used for jumping.

Individual pieces of rubber backed carpet — for balancing and rolling.

Inner tubes — for jumping around or in and out of.

Milk cartons and boxes with canes or wands set across to make low hurdles — jumping activities.

Plastic bottles cut into scoops and fleece or yarn balls — throw and catch balls.

Balls and a wall — throw balls against wall.

Bean bags and different sized boxes — toss bean bags into the boxes.

Balance beam(s) — different heights — different ways to cross the beam.

Inclined plank and mat — different ways to run up and jump off, roll after landing.

Select the number of activities needed according to the number of children, planning for about three to four children per station. Moving among the stations, the teacher can assist where necessary and set new challenges. Children can change activities on the

teacher's signal or move freely between activities. Many stations can be used during unstructured free play periods if they can be left in place. Additional activities may be tried.

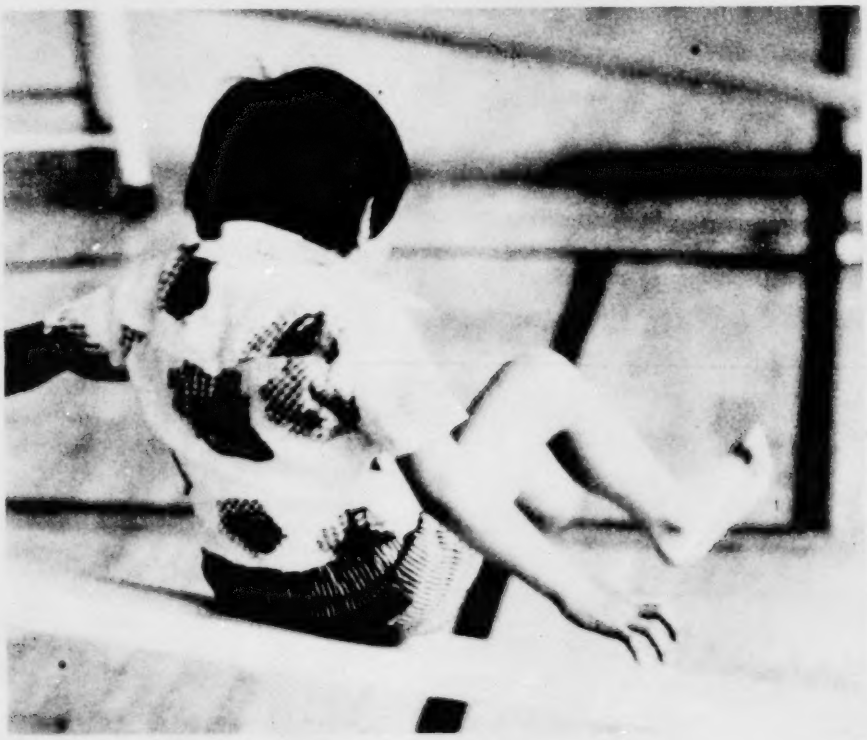
Working with balloons is ideal for young children because they move slowly and are very light. The children can try to find different ways to keep the balloons in the air or hit them over a rope or net to a partner.

Simple activities such as Simon Says, Follow the Leader, Matching or Mirroring a partner's movements can be fun and assist with coordination. Expressive movements can be stimulated by the way animals move, movements people make at work and play, the different felt moving on different surfaces, and by movement words such as shaking, wiggly, collapsing, stiff, loose. Other activities might involve movements expressing emotions, moving to music, acting out a poem or story.

Fine motor skills can be included in a movement program but are probably better integrated into the rest of the daily activities. Materials such as building blocks, pull-apart toys, buttons, shoe laces, hammer and nails, as well as sand and water play, should be provided.

Safety Considerations

Safety is always a concern for adults who deal with children. This is especially true for teachers mindful of problems that can occur in dealing with numbers of children — particularly when they are not ours. Preschool children probably fall more often than children of other age groups because they are learning how to balance. These years are important ones, therefore, for developing safe habits of moving. The teacher's job is to minimize unnecessary risks by carefully planning the learning environment and experiences.



Children generally attempt only what they feel they can manage. Teachers should avoid coercing children into activities for which they are not ready while at the same time allowing them to try new things. Both the coercive and over-protection teacher inadvertently thwart movement growth.

The activity space should be checked for any hazards that children might fall from or bump into. Apparatus needs to be monitored constantly for safety and possible defects. The following guidelines help teachers maintain a safe environment:

- Put out only equipment which children *may* use. Equipment, particularly large apparatus, has a special appeal to young children who will head immediately for the most inviting pieces.
- Station a responsible adult near high apparatus to *monitor* the activity and provide a helping hand if needed. Taking turns is easily learned if there are sufficient options, but children this age also need to learn to share.
- When using large apparatus have the children barefoot if possible. Stocking feet are slippery; barefeet or tennis shoes are preferred. Other clothing should be appropriately safe, that is, trousers which are too long should be rolled up and long skirts prohibited. Young children (and their parents) can learn to dress appropriately for good, safe movement.
- Admonish attending adults *never* to put a child on a piece of apparatus but to help her/him to find a way on *and* off if possible. An adult's bent knee or a handy box can be stepped on to gain the necessary height. Inherent in a sense of competence is learning to be realistic about what can and cannot be done by one's self. An attending teacher/adult cannot afford to push or lift one child lest all the rest clamor for similar assistance.
- Provide options: one of the greatest safety recommendations. With several different jumping heights, for example, the individual child does not feel coerced into trying more than he feels comfortable performing.

4 WHERE

Peter Werner

Spaces & Places

This chapter presents guidelines for designing areas where movement activities may take place and suggestions for a selecting equipment for movement education program. For those with a budget which allows for moderate to high expenditure, this chapter will provide suggestions for wise spending. For with little or no money, it will suggest ways to improvise.

Movement education experiences for children may occur in or out-of-doors. Play space, wherever located, should provide opportunities for total child development — physical, social, emotional and cognitive — but especially for large muscle activity. Providing for a wide variety of activity opportunities ensures optimal development for all children. A program with limited space will have to be modified.

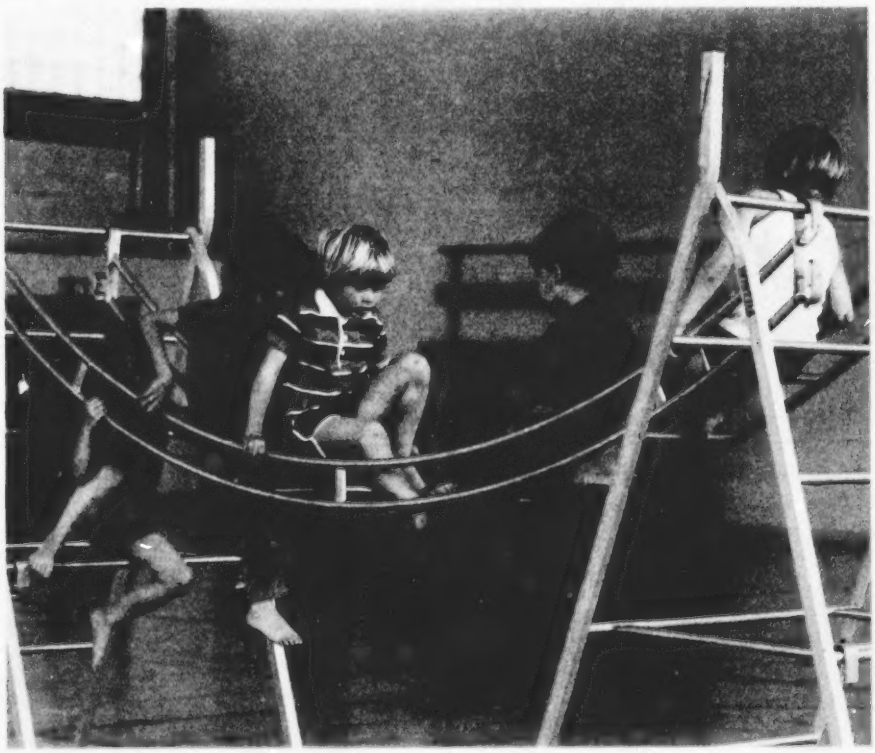
The space should be large enough to allow children to develop physical fitness as well as psycho-motor skills. Too much

space for very young children may be overpowering, in which case room dividers may be in order. Yet there should be adequate unobstructed space to permit strenuous running, chasing, and fleeing. It should also be suited to activities designed to help children increase their strength, particularly of the upper trunk, speed, balance, and coordination. It should also provide space and equipment where children may develop locomotion, stability, and manipulative skills.

Indoor Activity Areas

Indoor areas appropriate for large muscle activity are a gymnasium, cafeteria, stage, playroom, or hallway. Children need an area large enough to guarantee freedom of movement in personal as well as general space and a gymnasium is the preferred alternative. In smaller areas, such as a stage of hallway, children might be divided into groups which use the area in turn. Sometimes a learning center for story telling or music also can provide space for small group movement. After hearing a story, or listening to music or singing, children can explore movements which each suggests.

How then, the reader might ask, does this differ from what might be planned for the youngest children in elementary school? Ideally an elementary school gymnasium, with its climbing apparatus and manipulative equipment, can be used to advantage. In some instances gymnasia or other large areas have been considered to provide too much space for young children. This is not necessarily the case, for they need large spaces for running, changing direction, and stopping without bumping into each other. Children accommodate rapidly to large spaces and love the freedom of movement they permit. On the other hand, children have to exert more control over their movements in smaller areas and this learning takes time and practice. There are few collisions in large spaces,



so children and teachers are psychologically free to enjoy vigorous movement. The author found a room carpeted with a wrestling or floor-ex mat was ideal for running, rolling, and jumping skills.

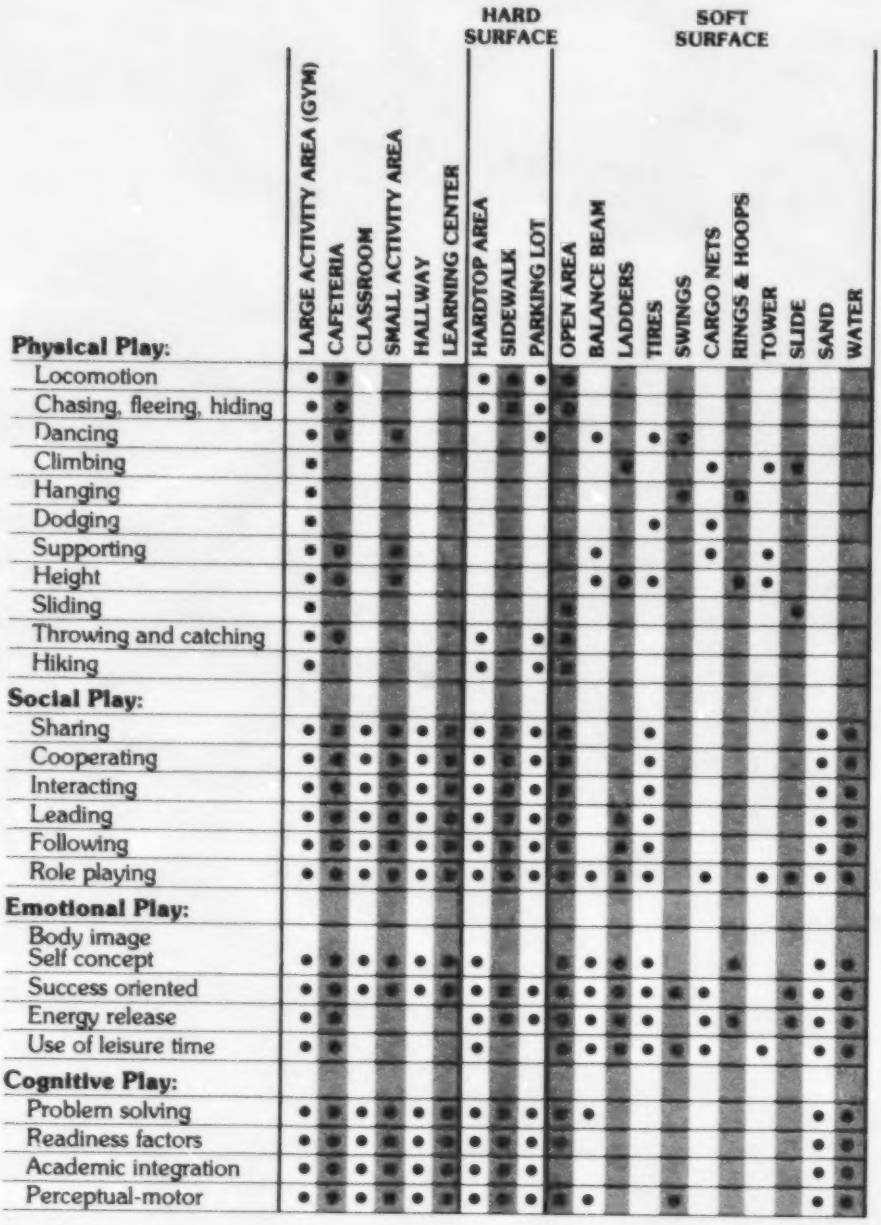
An indoor area must have bare wall as well as floor space so that children may throw, kick, or perform other manipulative actions against it, such as tossing bean bags or balls. The activity should be located where often noisy large muscle activity will not be disruptive.

Above all the indoor area should be clean. In a clean setting children feel free to roll, crawl, squirm or wiggle on the floor, and they can be permitted or required to go barefoot. Consistent with the philosophy of providing children with experiences of touch through a multi-sensory environment, children should be able to move with bare feet to feel textures and use their feet for gripping, pushing, and stopping with control.

Storage becomes a primary concern when providing an open, safe space for children's indoor movement experiences. Cabinets or shelves to store balls, records, etc. should be placed near where the equipment will be used without getting in the way, as they might be in the middle of the wall. A storage room, sometimes necessary for mats, balance beams, boxes, climbing frames and the like, should be convenient and large enough to accommmodate all large equipment. An adequate storage space permits the teacher to set out only what is to be used on a particular day. A good rule of thumb when working with very young children is to set out only what they may use with comparative safety. In other words, if the teacher does not want the children to use a specific piece of equipment when they enter for their activity, it is best kept out of sight.

FIGURE 1

PLAY MATRIX



While this chart may include more areas than are available, it is not intended to be all-inclusive. Teachers are encouraged to develop their own play matrix to see if play areas offer a wide variety of play experiences.

Outdoor Activity Areas

Generally speaking nursery school personnel have been able to make better use of outdoor than indoor facilities for large muscle activities. This is partly a matter of philosophy: children should be out of doors part of each day, and historically this has been the period during which children engage in large muscle activity. In the southern states, nursery schools, to their advantage, can have a significant part of the program out-of-doors.

Improvements in both stationary and portable equipment used by children have been made during the last decade. Tires have been incorporated in climbing apparatus and ropes, cargo nets, poles, and slides are often permanent playground equipment. This equipment responds to the need to practice fundamental physical skills during these years. Yet playgrounds in the north covered with ice and snow have limited winter use. Nor can children clad in boots and cumbersome clothes move freely.

Many out-of-door activity areas provide both a grassy section and one filled with or covered with sand. Grass is coveted for a movement education program for young children since rolling on the grass, tumbling, and even falling are favorite stunts. A hill as part of the playground layout also offers many possibilities. There is usually provision for a harder surface for tricycles, wagons, and other wheeled vehicles. In many nursery schools the permanent equipment makes an excellent gymnasium setting, and portable pieces like boxes and beams can be set up by the children themselves. Thus pushing, pulling, and lifting skills are incorporated into the learning situation.

A large, hard surface area may be transformed with a little paint into a wonderful learning center. Lines give children opportunities for balancing or following. Painted shapes — squares, circles, zigzags, and spirals — help children see and learn to follow pathways. Most children neurologically are not ready for balancing skills demanded of games like hop scotch, but they are ready to learn to jump red lines, follow blue ones, and hop across yellow ones. Older children may use the alphabet letters, numbers, and designs for simple recognition and reproduction through walking, hopping, or jumping along the straight, curved, or diagonal lines which make up a letter, number, or form. With or without painting, children can learn to bounce, kick, roll, throw, and catch balls and to perform an endless variety of locomotor activities on the hard surface area. Because of children's propensity to tumble and fall at this age, exercise care to ensure their safety and protect against skinned knees, elbows, and noses.

Ideally permanent playground equipment is surrounded with space and placed on a soft surface. In a natural setting the child can climb trees, balance on fences or railroad ties, jump from one rock to another to cross a brook, swing from a grapevine suspended from a tree, throw stones, and dig in the earth. Although a natural environment provides a wealth of resources appropriate to a movement education approach to learning physical skills, these environments are not readily available to many nursery schools.

Urban designers in the western hemisphere have attempted to meet activity needs of children by constructing playground equipment which substitutes for these natural environments. In countries where a high priority is placed on young children's needs and where population density has been severe, designers — Holland, Denmark and England offer fine examples — have been most successful. In a university community with which the author is familiar, parents pooled their resources and designed apparatus which fulfilled their children's needs.

Criteria for Playground Design

1. Equipment should be simple, safe, and natural. Exposed metal is a hazard in the cold of winter and heat of summer. Examine wood for splinters and ragged edges.
2. Equipment should be kept in good repair, with periodic checkups and replacement of worn or damaged parts.
3. Equipment should be attractive. Environmentalists prefer natural earth tones, but children sometimes like brighter colors.
4. Equipment should invite a child to climb and should not have steps greater than the knee height of those who will use it.
5. Bars should be close enough so children can easily reach the next rung, and the bars themselves small enough for children to grasp with their thumb in opposition to the fingers.
6. Equipment should be an appropriate height to offer challenge.
7. Sliding surfaces should be wide so more than one child can slide at a time.
8. Equipment should not have angles or points against which children can bump themselves.
9. Standing surfaces or areas should have protective railings.
10. Crawl spaces should have adequate openings to permit easy access by adults if necessary.

11. Wood materials should be preserved with a non-toxic substance.
12. Holes drilled in the bottom of tires will insure drainage.
13. Moving equipment (swings, ropes etc.) should be located toward the edge or corner of a play area to prevent injury to children as they run from one piece of apparatus to another.
14. Equipment should be arranged so that children playing on one piece will not interfere with children playing on another.
15. Equipment which provides a graduated challenge like different levels from which children can jump, permits risk-taking behavior and allows for thrills and adventure of a planned sort. Children like to take small risks and prove themselves successful.
16. Equipment should be easy to monitor by attending adults.
17. Surfaces under the equipment may be of sand, pine needles, wood chips, straw or grass. It should be well drained and landscaped to eliminate erosion, holes, and other problems.

Manipulative Equipment

With unlimited resources it would be easy to equip a pre-school movement education program. Ideally there would be enough balls of varying sizes, shapes, textures, and colors to permit choices. Yet it remains extremely important that each child have something to manipulate, throw, kick, catch, bounce, or strike. Children should not have to take turns learning and practicing manipulative skills. Although sharing is part of the socialization process, having ample opportunity to practice skills is more important at this age.

The following homemade equipment is useful to a varied movement education program. Construction and ideas for use are detailed in books cited in the reference section.

Make Your Own Equipment

Boxes	For traveling onto, off of, and over. Stuff with wadded up newspapers or use compartmented boxes from beverage store. Fit several compartmented boxes into larger box. Tape shut, cover or not (paint, contact paper).
Hoops	For twirling, rolling, tossing, games, and imaginative fun. Plastic plumbing pipe and nylon couplers (heat pipe ends in hot water before coupling). Multiply desired diameter by three to find length to cut.

Photograph by Carlyjane Dunn Rice

Coffee Can Stilts	Two or three pound cans. Use can bottom for child's foot. Place two holes in can close to bottom. Pass ends of rope into holes, tie knots. Place plastic lids over opening for marproof bottoms.
Newspapers	Large sheets for imaginative play. It can be a plane, a carpet, a flag, a you-name-it. Wad up sheets for "balls" to throw, toss and catch.
Plastic Bottles	For bowling pins and targets.
Larger jugs	For markers, with a little sand, gravel or dirt.
Larger jugs	Cut out for scoops or receptacles for catching.
Milk Cartons	For receptacles to catch in.
Carpet Samples	For balancing, resting and sliding on. Also make convenient stepping stones.
Coat Hangers	Bent, stretched over with nylon stocking and handle taped tightly for rackets.
Cones	For markers, coordination activities, knock-down pins.
Cardboard Tubes	Or plastic golf tubes for balancing, throwing, hitting, rolling hoops.
Yarn Balls	Heavy carpet yarn is best. Start with two flat cardboard "doughnuts." Size can vary from 2" across with ½" hole to 5" across with a 2½" hole. Place doughnuts together. Wrap yarn around the doughnut (through the hole and over the edges) until center is *filled*. Cut yarn at

	the outside edges so two cardboard pieces can be separated slightly. Tie good string between doughnuts and around yarn in center. A tight knot is the secret to longevity. Remove cardboard. Use scissors to shape ball.
Balloons	Punch balls and beach balls are slower, cheaper, and great for youngsters.
Inner Tubes	For all kinds of fun

Developed for the Shaker Heights City School District, Shaker Heights, Ohio, by Marion Sanborn.

Some Sources of Early Childhood Equipment

Garage Sales — You can't find better prices. Selection is limited but go with an open mind.

Educational Activities, Freeport, L.I., NY 11520. Good for records, etc.

Skill Development Equipment Co., 1340 N. Jefferson, Anaheim, CA 92807 — Unusual mats, balls, blocks.

Learning Products, Inc., 725 Fee Rd., St. Louis, MO 63043 — Colorful manipulative shapes.

J. R. Holcomb Co., 3000 Quigley Road, Cleveland, OH 44113 — All kinds of equipment.

Kimbo Educational Records, Box 246, Deal, NJ

Snitz Manufacturing Co., 104 S. Church St., East Troy, WI 53120 — Commercial yarn balls, a few other supplies.

New York Athletic Supply Co., 301 East 149 St., Bronx, NY 10451

Wolverine Sports, 745 State Ci., Ann Arbor, MI 48104.

When requesting catalogue, tell manufacturer what age children you work with. Some have several catalogues.

Developed for the Shaker Heights City School District, Shaker Heights, Ohio, by Marion Sanborn.

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ANNOTATED BIBLIOGRAPHY ON MOVEMENT EDUCATION

A collection of selected resources significant to a deeper understanding of the many aspects and definitions of movement education. Designed to serve a variety of professional needs — for a beginning specialist, experienced practitioner, classroom teacher, or any student of human movement. Listings are organized under major classifications of Theory and Practice. The latter is subdivided to cover basic movement, dance-drama, gymnastics, and sport. 1977.

WHO CAN . . .

Twenty series of pictures with text, illustrating education for movement in the primary grades. Offers a selection of basic activity forms — with variations and progression — which are based on movements fundamental to more complicated patterns as evidenced in more refined specific sports skills. The activities presented embody creative approaches to the traditional, meeting the needs of children to discover how to use their bodies efficiently. The activities covered require only simple equipment that can be used in and out of the gymnasium. Designed for use by the classroom teacher, advanced or beginning specialists, and in courses of professional preparation. By Liselott Diem, internationally recognized authority in the field. 1977.

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A new publication designed to encourage the greatest amount of participation in sports under conditions that are safe and enjoyable for all children — boys and girls, handicapped and able-bodied, rich and poor, physically gifted and awkward. The guidelines, developed in cooperation with such groups as the American Academy of Pediatrics and the American Medical Association, are appropriate for all children's sports programs, whether organized by schools, national youth sports agencies, or by regional and local sports organizations. 1979.

CHILDREN'S DANCE

A book designed to show how dance can be used in the classroom in lively, innovative ways. Appropriate for the classroom teacher as well as the specialist in dance and physical activities. Covers such topics as dance as an expression of feelings, folk and ethnic contributions, dancing for boys, and composing dance.

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